



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,048	06/24/2003	John Gibeau	202-0036	1047
28395	7590	06/16/2005	EXAMINER	
BROOKS KUSHMAN P.C./FGTL			HUANG, SIHONG	
1000 TOWN CENTER			ART UNIT	
22ND FLOOR			PAPER NUMBER	
SOUTHFIELD, MI 48075-1238			2632	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/604,048

Applicant(s)

GIBEAU, JOHN

Examiner

Sihong Huang

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-13 and 15-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3,5-13 and 15-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

Art Unit: 2632

## DETAILED ACTION

### *Response to Amendment*

1. This Office Action is responsive to the amendment filed on December 27, 2004. As directed by the amendment, claims 4 and 14 are canceled, claims 1, 3, 5, 6, 10, 13, 16 and 20 are amended, and new claims 21 and 22 are added. Thus, claims 1-3, 5-13 and 15-22 are presently pending in this patent application with claims 1, 10 and 20 being the independent claims.

2. The abstract is also amended to avoid the previously objected problem.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

TM  
613-05  
4. Claims ~~1-22~~<sup>1-3, 5-13, 15-22</sup> are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In independent claims 1, 10 and 20, the newly added limitation "routing of the phone call is carried out only through the wireless phone and a wireless network outside of the vehicle" is not supported by the originally filed disclosure. Applicant in section [0026] of the originally filed disclosure merely discloses transferring audio components from a cell phone to the audio equipments in a vehicle in a wireless manner, no specification on

Art Unit: 2632

the newly claimed routing limitation was provided. Thus, the amendment introduces new matter which was not supported by the originally filed disclosure and should be deleted.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*1-3, 5-7, 9-13, 15-17*

TM  
6-13-05  
6. Claims ~~1-7, 9-17~~ <sup>1-3, 5-7, 9-13, 15-17</sup> and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minagawa et al. (US 6,600,430 B2) in view of Frank et al. (US 2003/0224840 A1).

**Regarding claims 1, 10, 11, 21 and 22**, Minagawa et al disclosed a system (Figs. 1, 2 and 4) for use in a vehicle for connecting a wireless device (portable device, such as telephone set (col. 1, line 19), personal information assist device PDA, electronic note book or the like, col. 2, lines 48-52) carried by an individual to a vehicle network (col. 1, lines 6 and 13, etc.), the system (Figs. 1, 2 and 4) comprising:

a hands-free sensor (the getting-on sensors, sensors such as a seat weight sensor (col. 3, line 14), an infrared ray sensor (col. 3, line 14), vehicle door opening/closing sensor or detector (col. 3, lines 12-13 and col. 7, lines 15-16), pressure sensor (col. 7, lines 17-18), etc.) for generating a sensor signal (any one of the output signals of the getting-on sensors indicating the individual is positioned within a predefined distance relative to the vehicle (col. 1, lines 8-11 and col. 2, lines 20-27, etc.); and

a module (see Figs. 2 and 4) enabled based on the sensor signal for determining whether the individual is carrying the wireless device (that is, based on the output signal of the getting-on

Art Unit: 2632

sensor, an inquiry signal is sent intermittently to start the automatic set up of the wireless link between the portable unit (Fig. 1) and the vehicle network (Fig. 2, col. 6, line 52 to col. 7, line 20)) and for connecting the wireless device (telephone set or PDA, etc.) carried by the individual to the vehicle network (that is, if the wireless device is within range, the wireless device will respond to the communication from the vehicle network and start comparing setting-up code, when the setting-up codes are coincident with each other, a wireless link is established, col. 3, lines 23-30).

Minawawa et al further included a speaker module 35 and microphone module (col. 8, lines 35-37) connected to the vehicle network for carrying hands free mode phone conversation, and a wireless device having telephone functions for carrying phone conversation (col. 2, lines 35-37). Minawawa et al differ from the claimed invention in that it does not disclose transferring the phone conversation (or call) from the wireless device (portable wireless telephone, mobile phone, or cellular) to the vehicle network for continuing the phone conversation using the speakers and microphone modules in hands free mode. However, Frank et al, from the same field of endeavor, similarly teach a communication system in which Bluetooth technology or protocol (pp 0016, line 10 and pp0036, line 4) is used for carrying out communication between a mobile phone (pp 41) and speakers module (105, 106) and microphone module (107) of a vehicle network 101 (pp 0035, lines 2-4 and pp 0043). Frank et al, in Fig. 3 and in pp 0050 further teach that a phone call on the mobile phone can be transferred to the telematics device or vehicle network (101, pp 0043) for continuing the phone call or conversation in the vehicle using the speakers module and a microphone module in the hands free mode. Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention

Art Unit: 2632

to apply the transfer call method or means as taught by Frank et al 1 to the system of Minagawa et al. One of ordinary skill in the art would have been motivated to do this because it allows continuing a phone conversation without disconnection or dropping of the call and at the same time allows a user or operator to carry on phone conversation in the hands-free mode and operate the vehicle. The specific routing as claimed in claims 1 and 10 is an obvious modification to the system of Minagawa based on how the vehicle network is programmed to operate. For example, which vehicle component(s) are to be used/programmed for the hand-free wireless call and to what degree of hand-free one desired after the automatic wireless connection established.

**Regarding claims 2 and 12**, the module (see Figs. 2 and 4) being configured to interpret the sensor signal (the output signals from the getting-on sensors) to determine whether the individual desires to sit in the vehicle (for example, by the output signal of the seat weight sensor and/or infrared sensor, etc., that is, when a user sits into the seat of the vehicle, the seat weight sensor/getting-on sensor will generate a sensor signal indicating that the user desires to sit in the car) and whether the individual desires to exit the vehicle (for example, by the seat weight sensor or door opening/closing sensor or infrared sensor, etc., that is, when the sensor senses no weight on seat, and/or vehicle door opened and then closed, and/or no human body is detected).

**Regarding claims 7 and 17**, the hands-free sensor of Minagawa et al is a door switch (col. 7, line 16 and col. 3, line 13).

**Regarding claims 9 and 19**, the hands-free sensor of Minagawa et al is a seat weight sensor (col.3, line 14).

**Regarding claims 3, 5, 13 and 15**, Minawawa et al differ from claims 3-5, 13-16 and 20 in that the wireless communication disclosed in the preferred embodiment illustrated in Figs. 1, 2

Art Unit: 2632

and 4 is not carried out by Bluetooth technology or protocol. However, at the end of the disclosure (col. 10, lines 2-4), Minawawa et al suggested that Bluetooth protocol or technology can be employed for the wireless communication in order to reduce cost. Based on this teaching, it would have been extremely obvious to a person having ordinary skill in the art at the time of the invention to employ the Bluetooth technology as suggested by Minawaw et al to carry out the wireless communication of the preferred embodiment or system shown in Figs. 1, 2 and 4 in order to reduce cost.

**Regarding claims 3 and 13**, the modified system (that is by replacing the wireless communication of Figs. 1 and 2 with Bluetooth technology or protocol) of Minawaw et al will have a Bluetooth enabled module and the Bluetooth module is configured to create the wireless link or communication. As described above, when the getting-on sensor (such as seat weight sensor, infrared sensor, etc.) generates an output (such as when the seat weight sensor detects weigh or the infrared sensor detects a human body, etc.), an inquiry signal is sent intermittently to start the automatic set up of the wireless link between the portable unit (Fig. 1) and the vehicle network (Fig. 2, col. 6, line 52 to col. 7, line 20) and for connecting the wireless device (telephone set or PDA, etc.) carried by the individual to the vehicle network (that is, if the wireless device is within range, the wireless device will respond to the communication from the vehicle network and start comparing setting-up codes, when the setting-up codes are coincident with each other, a wireless link is established, col. 3, lines 23-30).

**Regarding claims 5 and 15**, as explained above, the modified system will have the Bluetooth enabled module for creating wireless communication link for connecting the wireless device (such as PDA, telephone set, electronic note, etc.) to the vehicle network (see Fig. 2)

Art Unit: 2632

when the individual desires to sit in the vehicle (sensed by the getting-on sensors such as the seat weight sensor, door opening/closing sensor, and/or infrared sensor, etc.) and for disconnecting an established wireless link (col. 4, lines 3-6, 9-12, 16-18 and 22-26, etc.) when the individual desires to exit the vehicle (for example, by the seat weight sensor, door opening/closing sensor or infrared sensor, etc., that is, when the sensor senses no weight on seat and/or vehicle door opened and then closed, and/or no human body).

**As to claims 6 and 16**, the modified system of Minagawa et al also does not teach transferring the call from the vehicle network (101, pp0043) to the wireless device (or mobile phone). However, as disclosed above, Frank et al teach a similar system. Frank et al in Fig. 3 and section [0050] not only teach transferring a call from the mobile phone to vehicle network for hands-free mode phone conversation but also a call from vehicle network can be transferred to the mobile phone (pp 0050). Since it is well recognized that Bluetooth technology or protocol is practical for only short distance or range, it would have been obvious to a person having ordinary skill in the art at the time of the invention to transfer a call or phone conversation from the vehicle network to the mobile phone for continuing the phone conversation or call when the wireless communication link between the vehicle network and mobile phone is out of range (i.e., disconnected) in order to maintain voice communication on the mobile phone in a conventional way.

**Regarding claim 20**, Minagawa et al disclosed the system as discussed above and further included a door opening/closing sensor (col. 3, lines 10-13 and col. 7, lines 15-16), a module (Figs. 2 and 4), a speaker module 35 and microphone module (col. 8, lines 35-37) connected to the vehicle network for carrying hands free mode phone conversation, and a



Art Unit: 2632

wireless device having telephone functions for carrying phone conversation (col. 2, lines 35-37).

The system of Minagawa et al differs from claim 20 in that the preferred embodiment does not employ Bluetooth technology or protocol and does not disclose transferring the phone conversation (or call) from the wireless device (portable wireless telephone, mobile phone, or cellular) to the vehicle network for continuing the phone conversation through the speakers and microphone modules in hands free mode. However, as disclosed above, at the end of the disclosure (col. 10, lines 2-4 of Minagawa et al), Minagawa et al clearly suggest that Bluetooth protocol or technology can be employed for the wireless communication in order to reduce cost. Furthermore, Frank et al, from the same field of endeavor, similarly teach a communication system in which Bluetooth technology or protocol (pp 0016, line 10 and pp0036, line 4) is used for carrying out communication between a mobile phone (pp 41) and speakers module (105, 106) and microphone module (107) of a vehicle network 101 (pp 0035, lines 2-4 and pp 0043). Frank et al, in Fig. 3 and pp 0050, further teach that a phone call on the mobile phone can be transferred to the telematics device or vehicle network (101, pp 0043) for continuing the phone call or conversation in the vehicle through the speakers module and a microphone module in the hands free mode. Fig. 3 of Frank et al shows the determination of whether the operator or individual is conducting a phone conversation (note, in order to transfer call carried by the mobile phone to the speaker module and microphone module in the vehicle network in hands free mode, it must determine the individual or user is conducting a call or phone conversation, otherwise there is no need to transfer the call to the hands free mode). Based on the teaching of Frank et al, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the call transfer method or means and Bluetooth communications as taught

Art Unit: 2632

by Frank et al 1 to the system of Minagawa et al. One of ordinary skill in the art would have been motivated to do this because it allows continuing phone conversation without disconnection or dropping of the call and at the same time allows a user or operator to carry on phone conversation in the hands-free mode while operating the vehicle as well as to reduce cost. In addition, the specific routing as claimed in claim 20 is an obvious modification to the system of Minagawa based on how the vehicle network is programmed to operate. For example, which vehicle component(s) are to be used/programmed for the hand-free wireless call and to what degree of hand-free one desired after the automatic wireless connection established.

7. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minagawa et al. in view of Frank et al. as applied to claims 1 and 10 above, and further in view of Van Bosch et al. (US 2003/0098784 A1).

The modified system of Minagawa et al and Frank et al differs from **claims 8 and 18** of the present invention in that Minagawa et al do not disclose that the hands-free sensor includes a motion sensor. However, Van Bosch et al disclose a similar system in which a portable wireless device or cellular phone 112 (pp 0015, lines 10-11) communicates with a vehicle network (Fig.3). Van Bosch et al further teach that a motion sensor 206 is employed to detect the occupancy of the vehicle (pp 0020). As Minagawa et al suggest other type of sensors can be used (col. 7, lines 13-20), it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ any type of conventional sensors such as motion sensor taught by Van Bosch et al for the modified system of Minagawa et al and Frank et al for the purpose of monitoring occupancy of the vehicle. This supporting rationale is based on the fact

Art Unit: 2632

that this is not the result of an attempt by the applicant to solve an unknown problem but merely amount the expenditure of selection of sensors known to a skilled artisan as design choice.

***Response to Arguments***

8. Applicant's arguments filed December 27, 2004 have been fully considered but they are not persuasive.

Applicant in the remarks argued that both Minagawa and Frank patents fail to teach “a module for connecting a wireless phone to vehicle network such that an audio component of a phone call carried out on the wireless phone is conducted in a wireless manner through a speaker and microphone module connected to the vehicle network and a routing of the phone call is carried out only through the wireless phone and a wireless network outside of the vehicle” (page 9 of the amendment). First of all, both patents teach automatic wireless connection between a wireless phone and vehicle network to enhance hand-free audio communication through the speaker and microphone of the vehicle. Minagawa patent does not specifically disclose that the automatic wireless connection and call transferred can be done while a call conversation is active on the wireless phone and thus the conversation can be continued on through the vehicle network. However, Frank patent teaches such wireless connection and audio transferred. As discussed in the rejection above, the specific routing as claimed in claims 1, 10 and 20 is an obvious modification to the system of Minagawa based on how the vehicle network is programmed to operate. For example, which vehicle component(s) are to be used/programmed for the hand-free wireless call and to what degree of hand-free one desired after the automatic wireless connection established.

*Conclusion*

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

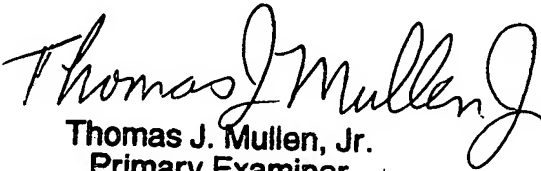
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sihong Huang whose telephone number is 571-272-2958. The examiner can normally be reached on Mon & Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sihong Huang  
June 13, 2005

  
Thomas J. Mullen, Jr.  
Primary Examiner  
Art Unit 2632  
6-13-05